

uralization. Such caution is probably only necessary in Northern New England where the mugo pine is generally free of insect infestation that further south could be a deterrent to its successful spread. — DEPT. OF HORTICULTURE AND DEPT. OF BOTANY, UNIV. OF NEW HAMPSHIRE, DURHAM.

DISCOVERY OF *ARENARIA MARCESCENS* IN THE UNITED STATES. — While botanizing in northern Vermont this past summer the writer collected a species of *Arenaria* which he at first thought to be *A. groenlandica*, known from alpine areas in the state. However, upon subsequent examination the specimens were found to be distinctly different from *A. groenlandica*, closely resembling the description of *A. marcescens* given in the 8th edition of Gray's Manual. Additional material was later collected and sent to Dr. Marcel Raymond of the Montreal Botanical Garden who kindly confirmed the identification of the plant as *Arenaria marcescens* Fern.

The station for the plant is at an altitude of about 3200 ft. on Haystack Mountain in the town of Lowell, Orleans County. Here a series of north-facing serpentine ledges is moistened by seepage from the top of the mountain and provides a habitat suitable for plants of arctic-alpine affinities. *A. marcescens* is found growing abundantly in crevices and shelves of the ledges, often trailing down thus giving a hanging basket effect. Other species associated with it are *Lycopodium Selago*, *Agrostis borealis*, *Scirpus caespitosus* var. *callosus*, *Empetrum nigrum*, *Vaccinium uliginosum* var. *alpinum*, *Houstonia caerulea*, and *Campanula rotundifolia*. Of these, *Agrostis borealis* and *Empetrum nigrum* were previously reported in the state only from the summits of Mt. Mansfield and Camels Hump.

The distribution of *Arenaria marcescens* as given by Fernald in Gray's Manual of Botany, 8th edition, is western Newfoundland and Mt. Albert, Gaspé Co., Quebec. Its occurrence in northern Vermont represents a notable extension south of its previously known range as well as being an interesting addition to the flora of the United States. Specimens have been deposited in the writ-

er's own herbarium (*P. W. Cook*, 556, 584) and in the Pringle Herbarium at the University of Vermont (*L. A. Charette*, 2231).

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NEW FORMS OF TRILLIUM RECURVATUM. — As in *Trillium grandiflorum* (Michx.) Salisb. and *T. erectum* L., variations in color and number of floral parts, with various modifications, occur in *T. recurvatum* Beck and other species of the genus.

The recent examination of the herbarium of the Southeast Missouri State College at Cape Girardeau, Missouri, has revealed two additional variations in *T. recurvatum* which merit recognition. Both of them are apparently not uncommon in Houck's Woods, an area located about three and one-half miles west-southwest of Cape Girardeau, Cape Girardeau County, Missouri.

Trillium recurvatum Beck, forma **petaloideum** Steyermark, f. nov., a f. *recurvatum* sepalis submembranaceis petaloideis vinaceo-purpureis recedit. — Houck Woods, Bloomfield Road, Cape Girardeau Co., Missouri, April 6, 1949, *Wayne Adams*, HOLOTYPE, in Herb. Southeast Missouri State College. In this form the three sepals have become petaloid in texture, shape, and color, their color being entirely maroon-colored or nearly so. They have the same thin texture as the petals. An extra sepal may be present, and, if so, is foliar in appearance.

Trillium recurvatum Beck, forma **foliosum** Steyermark, f. nov., a f. *recurvatum* staminibus carpellis sepalis petalisque viridibus foliosis recedit. — Houck Woods, Bloomfield Road, Cape Girardeau Co., Missouri, April 6, 1949, *Wayne Adams*, HOLOTYPE, in Herb. Southeast Missouri State College. In this form the sepals and petals, as well as the stamens and carpels, have become foliar in appearance, producing an entirely leafy, completely sterile plant. Mr. Adams notes on the label that both variations are "not rare." They were found with normal populations of the species.

—JULIAN A. STEYERMARK.